

CLAIMS

What is claimed is:

- 1 1. A reflective-type liquid crystal display comprising:
2 a first-type electrode;
3 a second-type electrode positioned opposite said first-type electrode and
4 being of an opposite type than said first-type electrode; and
5 a liquid crystal material between said first-type electrode and said second-
6 type electrode,
7 wherein at least one of said first-type electrode and said second-type
8 electrode includes an amorphous layer adjacent said liquid crystal material.

1 2. The reflective-type liquid crystal display in claim 1, wherein said first-type
2 electrode comprises a transmissive-type electrode and said second-type electrode
3 comprises a reflective-type electrode.

1 3. The reflective-type liquid crystal display in claim 1, wherein said
2 amorphous layer comprises one of a hydrogenated amorphous carbon silicon,
3 germanium, SiO_2 , Si_3N_4 and TiO_2 .

1 4. The reflective-type liquid crystal display in claim 1, wherein said
2 amorphous layer has a unidirectional orientation matched to said liquid crystal
3 material.

1 5. The reflective-type liquid crystal display in claim 1, further comprising
2 one of a polyimide layer, polyamide layer and oblique-evaporated inorganic layer
3 between said amorphous layer and said liquid crystal material.

1 6. The reflective-type liquid crystal display in claim 1, wherein a voltage
2 between said first-type electrode and said reflective electrode varies a
3 transparency of said liquid crystal material.

1 7. The reflective-type liquid crystal display in claim 1, wherein said
2 amorphous layer comprises a passivation layer.

1 8. A reflective-type liquid crystal display comprising:
2 a transmissive electrode;
3 a reflective electrode positioned opposite said transmissive electrode; and
4 a liquid crystal material between said transmissive electrode and said
5 reflective electrode,

6 wherein at least one of said transmissive electrode and said reflective
7 electrode includes an amorphous carbon layer adjacent said liquid crystal material.

1 9. The reflective-type liquid crystal display in claim 8, wherein said
2 transmissive electrode comprises indium tin oxide and said reflective-type
3 electrode comprises aluminum.

1 10. The reflective-type liquid crystal display in claim 8, wherein said
2 amorphous carbon layer comprises one of a hydrogenated amorphous carbon
3 silicon, germanium, SiO_2 , Si_3N_4 and TiO_2 .

1 11. The reflective-type liquid crystal display in claim 8, wherein said
2 amorphous carbon layer has a unidirectional orientation matched to said liquid
3 crystal material.

1 12. The reflective-type liquid crystal display in claim 8, further comprising
2 one of a polyimide layer, polyamide layer and oblique-evaporated inorganic layer
3 between said amorphous carbon layer and said liquid crystal material.

1 13. The reflective-type liquid crystal display in claim 8, wherein a voltage
2 between said transmissive electrode and said reflective electrode varies a
3 transparency of said liquid crystal material.

1 14. The reflective-type liquid crystal display in claim 8, wherein said
2 amorphous carbon layer comprises a passivation layer.

1 15. A method of forming a reflective-type liquid crystal display comprising:
2 forming a first-type electrode;
3 forming a second-type electrode positioned opposite said first-type
4 electrode and being of an opposite type than said first-type electrode;
5 forming a liquid crystal material between said first-type electrode and said
6 second-type electrode; and
7 forming an amorphous layer on at least one of said first-type electrode and
8 said second-type electrode adjacent said liquid crystal material.

1 16. The method in claim 15, wherein said forming of said first-type electrode
2 comprises forming a transmissive-type electrode and said forming of said second-
3 type electrode comprises forming a reflective-type electrode.

1 17. The method in claim 15, wherein said forming of said amorphous layer
2 comprises forming one of a hydrogenated amorphous carbon silicon, germanium,
3 SiO_2 , Si_3N_4 and TiO_2 layer.

1 18. The method in claim 15, wherein method includes forming said
2 amorphous layer to have a unidirectional orientation matched to said liquid crystal
3 material.

1 19. The method in claim 15, further comprising forming one of a polyimide
2 layer, polyamide layer and oblique-evaporated inorganic layer between said
3 amorphous layer and said liquid crystal material.

1 20. The method in claim 15, wherein a voltage between said first-type
2 electrode and said reflective electrode varies a transparency of said liquid crystal
3 material.